

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended) An electrophotographic photoconductor, comprising:  
an electroconductive substrate; and  
a photoconductive layer on or above the electroconductive substrate, the photoconductive layer comprising:  
a cross-linked surface layer which comprises:  
a cured tri- or more-functional radical polymerizable monomer without having a charge transporting structure; and a cured mono-functional radical polymerizable compound having a charge transporting structure, wherein the cross-linked surface layer has a surface roughness Rz of 1.3  $\mu\text{m}$  or less; and

the cured mono-functional radical polymerizable compound having a charge transporting structure has a functional group selected from the group consisting of an acryloyloxy group, a methacryloyloxy group and a vinyl group.

Claim 2 (Original) An electrophotographic photoconductor according to Claim 1, wherein the cross-linked surface layer has a surface roughness Rz of 1.0  $\mu\text{m}$  or less.

Claim 3 (Original) An electrophotographic photoconductor according to Claim 1, wherein the cured tri- or more-functional radical polymerizable monomer without having a charge transporting structure has a functional group selected from the group consisting of an acryloyloxy group and a methacryloyloxy group.

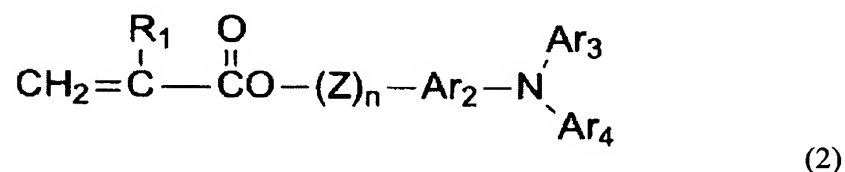
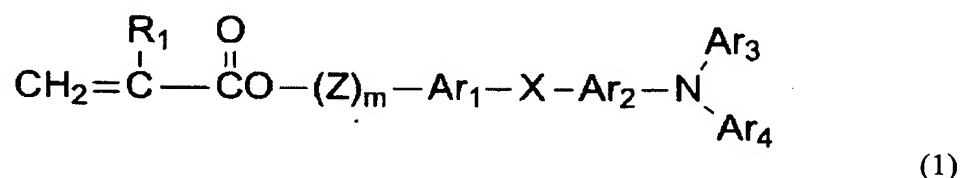
Claim 4 (Original) An electrophotographic photoconductor according to Claim 1, wherein the cured tri- or more-functional radical polymerizable monomer without having a

charge transporting structure has a ratio (molecular weight/number of functional group) of molecular weight to the number of functional group of 250 or less.

Claim 5 (Cancelled).

Claim 6 (Original) An electrophotographic photoconductor according to Claim 1, wherein the charge transporting structure of the cured mono-functional radical polymerizable compound having a charge transporting structure is a triarylamine structure.

Claim 7 (Currently amended) An electrophotographic photoconductor according to Claim 1, wherein the cured mono-functional radical polymerizable compound having a charge transporting structure is represented by one of the formulae (1) and (2):



wherein, R<sub>1</sub> represents a hydrogen atom or a methyl group, ~~a halogen atom, an alkyl~~

~~group which may be substituted, an aralkyl group which may be substituted, an aryl group which may be substituted, a cyano group, a nitro group, an alkoxy group, COOR<sub>7</sub> (R<sub>7</sub> represents a hydrogen atom, an alkyl group which may be substituted, an aralkyl group which may be substituted or an aryl group which may be substituted), a halogenated carbonyl group or CONR<sub>8</sub>R<sub>9</sub> (R<sub>8</sub> and R<sub>9</sub> represent a hydrogen atom, a halogen atom, an alkyl group which may be substituted, an aralkyl group which may be substituted or an aryl group which may be substituted, which may be identical or different);~~

Ar<sub>1</sub> and Ar<sub>2</sub> represent a substituted or unsubstituted arylene group, which may be identical or different;

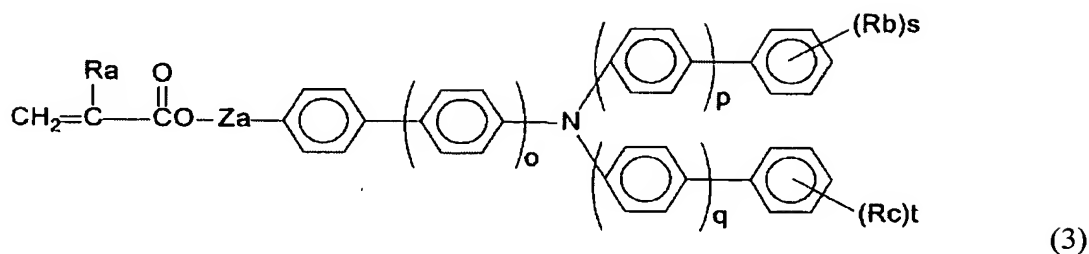
Ar<sub>3</sub> and Ar<sub>4</sub> represent a substituted or unsubstituted aryl group, which may be identical or different;

X represents a single bond, a substituted or unsubstituted alkylene group, a substituted or unsubstituted cycloalkylene group, a substituted or unsubstituted alkylene ether group, an oxygen atom, a sulfur atom or a vinylene group;

Z represents a substituted or unsubstituted alkylene group, a substituted or unsubstituted alkylene ether group or an alkyleneoxycarbonyl group; and

"m" and "n" represent an integer of 0 to 3.

Claim 8 (Original) An electrophotographic photoconductor according to Claim 1, wherein the cured mono-functional radical polymerizable compound having a charge transporting structure is represented by the following formula (3):



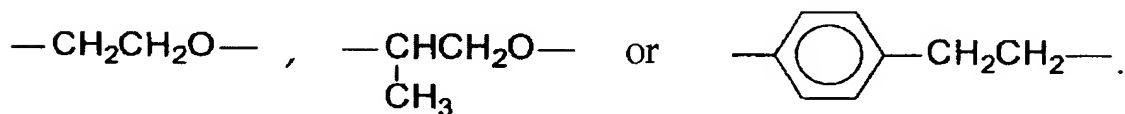
wherein, "o," "p" and "q" each represent an integer of 0 or 1;

Ra represents a hydrogen atom or a methyl group;

Rb and Rc represent an alkyl group having 1 to 6 carbon atoms, wherein each of Rb and Rc may be different when there are two or more Rb and Rc, respectively;

"s" and "t" represent an integer of 0 to 3; and

Za represents a single bond, a methylene group, an ethylene group,



Claim 9 (Original) An electrophotographic photoconductor according to Claim 1, wherein the cured tri- or more-functional radical polymerizable monomer without having a charge transporting structure is 30% to 70% by weight, based on the total amount of the cross-linked surface layer.

Claim 10 (Original) An electrophotographic photoconductor according to Claim 1, wherein the cured mono-functional radical polymerizable compound having a charge transporting structure is 30% to 70% by weight, based on the total amount of the cross-linked

surface layer.

Claim 11 (Original) An electrophotographic photoconductor according to Claim 1, wherein the photoconductive layer comprises:

a charge generation layer;

a charge transport layer; and

the cross-linked surface layer laminated on or above the electroconductive substrate in this order.

Claim 12 (Original) An electrophotographic photoconductor according to Claim 11, wherein the charge transport layer comprises a polymer charge transport material.

Claim 13 (Original) An electrophotographic photoconductor according to Claim 12, wherein the polymer charge transport material is a polycarbonate having a triarylamine structure in the main chain or side chain thereof.

Claim 14 (Original) An electrophotographic photoconductor according to Claim 1, wherein the cross-linked surface layer is cured by one of heating and light irradiation.

Claim 15 (Original) An electrophotographic photoconductor according to Claim 11, wherein the cross-linked surface layer has a thickness of from 1  $\mu\text{m}$  to 10  $\mu\text{m}$ .

Claim 16 (Original) An electrophotographic photoconductor according to Claim 11, wherein the thickness is from 2  $\mu\text{m}$  to 8  $\mu\text{m}$ .

Claim 17 (Original) An electrophotographic photoconductor according to Claim 11, wherein the cross-linked surface layer is insoluble in an organic solvent.

Claim 18 (Currently Amended) A process for forming an image, comprising:

- charging an electrophotographic photoconductor;
- exposing the electrophotographic photoconductor which is charged to a recording light so as to form an electrostatic latent image;
- developing the electrostatic latent image by a developing agent so as to visualize the electrostatic latent image and form a toner image; and
- transferring the toner image formed by developing onto a transfer material,

wherein the electrophotographic photoconductor comprises:

- an electroconductive substrate;
- a photoconductive layer on or above the electroconductive substrate, the photoconductive layer comprising:
  - a cross-linked surface layer which comprises:
    - a cured tri- or more-functional radical polymerizable monomer without having a charge transporting structure; and
    - a cured mono-functional radical polymerizable compound having a charge transporting structure,
  - wherein the cross-linked surface layer has a surface roughness  $R_z$  of 1.3  $\mu\text{m}$  or less; and
  - the cured mono-functional radical polymerizable compound having a charge transporting structure has a functional group selected from the group consisting of an acryloyloxy group, a methacryloyloxy group and a vinyl group.

Claim 19 (Currently Amended) An apparatus for forming an image, comprising:

- an electrophotographic photoconductor;
- a charger to charge the electrophotographic photoconductor;
- an exposer to expose the electrophotographic photoconductor charged by the charger to a recording light to form an electrostatic latent image;
- a developing unit to supply a developing agent to the electrostatic latent image to visualize the electrostatic latent image and form a toner image; and
- a transferring unit to transfer the toner image formed by the developing unit on a transfer material,

wherein the electrophotographic photoconductor comprises:

- an electroconductive substrate;
- a photoconductive layer on or above the electroconductive substrate, the photoconductive layer comprising:
  - a cross-linked surface layer which comprises:
    - a cured tri- or more-functional radical polymerizable monomer without having a charge transporting structure; and
    - a cured mono-functional radical polymerizable compound having a charge transporting structure,

wherein the cross-linked surface layer has a surface roughness  $R_z$  of 1.3  $\mu\text{m}$  or less; and

the cured mono-functional radical polymerizable compound having a charge transporting structure has a functional group selected from the group consisting of an acryloyloxy group, a methacryloyloxy group and a vinyl group.

Claim 20 (Currently Amended) A process cartridge for an image forming apparatus,

comprising:

an electrophotographic photoconductor; and

at least one selected from the group consisting of:

a charger to charge the electrophotographic photoconductor;

a developing unit to supply a developing agent to an electrostatic latent image formed by exposure on the electrophotographic photoconductor to visualize the electrostatic latent image and form a toner image;

a transferring unit to transfer the toner image formed by the developing unit on a transfer material;

a cleaning unit to remove toner remaining on the electrophotographic photoconductor after transferring; and

a discharging unit to remove the latent image on the photoconductor after transferring so as to form a monolithic structure ,

wherein the process cartridge is adapted to be attached to and detached from a main body of the image forming apparatus, and

the electrophotographic photoconductor comprises:

an electroconductive substrate;

a photoconductive layer on or above the electroconductive substrate, the photoconductive layer comprising:

a cross-linked surface layer which comprises:

a cured tri- or more-functional radical polymerizable monomer without having a charge transporting structure; and

a cured mono-functional radical polymerizable compound having a charge transporting structure,

wherein the cross-linked surface layer has a surface roughness  $R_z$  of 1.3  $\mu\text{m}$  or



less; and

the cured mono-functional radical polymerizable compound having a charge transporting structure has a functional group selected from the group consisting of an acryloyloxy group, a methacryloyloxy group and a vinyl group.